

Title (en)
Process for producing an ethylene copolymer.

Title (de)
Verfahren zur Herstellung eines Äthylen-Copolymers.

Title (fr)
Procédé de fabrication d'un copolymère d'éthylène.

Publication
EP 0013837 A1 19800806 (EN)

Application
EP 79303068 A 19791228

Priority
JP 16120378 A 19781228

Abstract (en)
A process for producing an ethylene copolymer having a density of from 0.900 to 0.945 g/cm³ by copolymerizing a predominant amount of ethylene with a minor amount of an alpha-olefin containing at least 3 carbon atoms which process comprises first polymerizing a said alpha-olefin in the presence of a catalyst composed of (A) a titanium catalyst component supported on a magnesium compound, (B) an organoaluminum compound, and (C) an organic acid ester until 0.01 to 50 g of said alpha-olefin, per gram of the titanium catalyst component (A), have been polymerized, and second copolymerizing the ethylene and a said alpha-olefin in the presence of the said catalyst at a temperature of from room temperature to 100° C and a pressure of from 1 to 100 kg/cm² until more than 100 times the weight of the polymerformed in the first step has been produced. By means of this process it is possible to avoid problems associated with prior art processes, such as the low output of high temperature melt-polymerization techniques for producing high molecular weight copolymers or the dissolution or swelling of copolymers in the polymerization solvent employed in slurry polymerization methods.

IPC 1-7
C08F 210/16; C08F 4/64; C08F 297/08

IPC 8 full level
C08F 2/00 (2006.01); **C08F 2/04** (2006.01); **C08F 2/06** (2006.01); **C08F 4/00** (2006.01); **C08F 4/60** (2006.01); **C08F 4/64** (2006.01); **C08F 210/00** (2006.01); **C08F 210/16** (2006.01); **C08F 297/08** (2006.01)

CPC (source: EP US)
C08F 210/16 (2013.01 - EP US); **C08F 297/08** (2013.01 - EP US); **Y10S 526/904** (2013.01 - EP)

Citation (search report)

- FR 2322158 A1 19770325 - MONTEDISON SPA [IT]
- FR 2008619 A1 19700123 - STAMICARBON
- DE 2739608 A1 19780309 - MITSUI PETROCHEMICAL IND
- FR 2348231 A1 19771110 - MITSUI TOATSU CHEMICALS [JP]
- US 3268624 A 19660823 - JEZL JAMES L, et al
- FR 2210625 A1 19740712 - HUELS CHEMISCHE WERKE AG [DE]

Cited by
DE3150897A1; EP0125910A1; DE3149906A1; EP0282929A3; US4978722A; FR2525612A1

Designated contracting state (EPC)
AT BE DE FR GB IT NL

DOCDB simple family (publication)
EP 0013837 A1 19800806; **EP 0013837 B1 19830406**; AT E2959 T1 19830415; DE 2965167 D1 19830511; JP S5590515 A 19800709; JP S603324 B2 19850128; US 4298713 A 19811103

DOCDB simple family (application)
EP 79303068 A 19791228; AT 79303068 T 19791228; DE 2965167 T 19791228; JP 16120378 A 19781228; US 10673679 A 19791226